Application No.: 10/516,818 Amendment under 37 CFR 1.114
Art Unit: 1657 Attorney Docket No.: 043070

AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all prior versions of claims in the application.

1-8. (Cancelled)

·: 4

9. (Currently Amended): A composite material, comprising:

a biodegradable polymeric material, and

calcium phosphate in the biodegradable polymeric material,

wherein the calcium phosphate is contained in the biodegradable polymeric material in a

gradient of calcium phosphate that varies in the biodegradable polymeric material from a first

side of said biodegradable polymeric material to a second side of said biodegradable polymeric

material with an increasing linear gradient,

wherein the biodegradable polymeric material is selected from the group consisting of

glycosaminoglycan, collagen, and a composite of glycosaminoglycan and collagen, and

wherein said gradient of calcium phosphate is formed by alternately soaking the second

[[one]] side of the biodegradable polymeric material in a calcium ion-containing solution and the

second [[same]] side of the biodegradable polymeric material in a phosphate ion-containing

solution.

10. (Previously Presented): The composite material according to claim 9, wherein the

biodegradable polymeric material is a crosslinked product of glycosaminoglycan and collagen.

- 2 -

Application No.: 10/516,818 Amendment under 37 CFR 1.114

Art Unit: 1657 Attorney Docket No.: 043070

11. (Currently Amended): A scaffold for cell differentiation and proliferation, comprising:

the composite material according to claim 9, and

one or more components selected from the group consisting of basic fibroblast growth factors (bFGF), vascular endothelial growth factors (VEGF), bone morphogenetic factors (BMP),

and inorganic salts comprising calcium salt.

12-13. (Cancelled)

14. (Previously Presented): The scaffold according to claim 11, which further comprises cells.

15. (Currently Amended): A method for producing [[the]] a composite material, comprising the

step(s) of: according to claim 9

providing a biodegradable polymeric material selected from the group consisting of

glycosaminoglycan, collagen, and a composite of glycosaminoglycan and collagen, said

biodegradable polymeric material having a first side and a second side, and [[by]]

alternately soaking [[one]] the second side of the biodegradable polymeric material in a

calcium ion-containing solution and the second [[same]] side of the biodegradable polymeric

material in a phosphate ion-containing solution.

- 3 -

Application No.: 10/516,818 Amendment under 37 CFR 1.114
Art Unit: 1657 Attorney Docket No.: 043070

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16. (Previously Presented): The scaffold according to claim 11, wherein the scaffold is porous.

17. (Currently Amended): A scaffold for cell differentiation and proliferation, comprising:

the composite material The scaffold according to claim 9,

wherein the composition gradient of calcium phosphate is a constant gradient.